

**MODULE VI - CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS**  
**SCHEDULE OF COMPLIANCE**

**VI.A.        SOLID WASTE MANAGEMENT UNITS**

VI.A.1.        The Permittee shall conduct corrective action in accordance with Module VI, for each Solid Waste Management Unit (SWMU) specified in Attachment 6.

VI.A.2.        SWMUs may be added to those listed in Attachment 6 in accordance with R315-3-4.

**VI.B.        RCRA FACILITY INVESTIGATION**

VI.B.1.        The Permittee shall conduct an RCRA Facility Investigation (RFI) to determine the nature and extent of known and suspected releases of hazardous wastes or hazardous constituents from each SWMU at the Facility, as identified in Attachment 6, and to gather data to support the Corrective Measures Study. The Permittee shall conduct the RFI in accordance with this Module.

VI.B.2.        The Permittee has submitted RFI Workplans and an RFI Phase I Report for SWMUs as indicated in the SWMU Table, Attachment 6. Upon review of the Phase I Report by the Executive Secretary, the Permittee shall, as directed by this Module, initiate additional investigation, corrective action, or take no further action for each SWMU included in the Phase I Report. The Permittee shall conduct the proposed action as approved by the Executive Secretary.

VI.B.3.        Within 60 days of the issuance of this permit, the Permittee shall submit for Executive Secretary approval a schedule for submitting SWMU Assessment Reports or RFI Workplans for the SWMUs listed in Attachment 6 that have not yet been investigated.

VI.B.4.        The Permittee shall notify the Executive Secretary of all newly identified SWMUs, and shall submit a SWMU Assessment Report in accordance with Conditions VI.H.1. and VI.H.2. or an RFI Workplan as directed below.

**VI.C.        RFI WORKPLAN**

VI.C.1.        The RFI Workplan shall include a description of the purpose and objectives of the plan, a list of the SWMUs or SWMU groups that will be investigated under the plan, and an explanation of how the investigation will be conducted. Specifically, the RFI Workplan shall include provisions for:

VI.C.1.a.        Source characterization, including the nature of the SWMU (operating practices and period of operation), the type of waste(s) associated with the unit, and the chemical and physical characteristics of the waste(s);

- VI.C.1.b. Contamination characterization, defining the degree, three dimensional extent, and migration of contamination released from the SWMU; and
- VI.C.1.c. Potential receptor identification, describing the potential for human and environmental impact from contaminant exposure from the facility, including human populations and environmental systems that currently or potentially are at risk of contaminant exposure.
- VI.C.2. The RFI Workplan shall also include the following elements:
  - VI.C.2.a. A Project Management Plan, which will include a discussion of the technical approach to the investigation, project organization, and management responsibilities of the key personnel that will implement the RFI Workplan;
  - VI.C.2.b. Sampling and Analysis Plans to detail how the source, nature and extent of contamination will be characterized at each SWMU or group of SWMUs;
  - VI.C.2.c. A Quality Assurance Plan to establish the quality assurance/quality control goals and protocols for a specific data collection activity. The Quality Assurance Plan sets forth procedures for sampling and analysis activities that will generate data of a quality commensurate with the data quality objectives stated in the Sampling and Analysis Plan;
  - VI.C.2.d. A Data Management and Reporting Plan to track and document investigation data and results; and
  - VI.C.2.e. A schedule for completing the RFI Workplan once it is implemented.
- VI.C.3. Within 30 days of Executive Secretary approval, the Permittee shall implement the RFI Workplan.
- VI.C.4. Within 90 days of completion of the RFI , the Permittee shall submit an RFI Report to the Executive Secretary for approval. The RFI Report shall include:
  - VI.C.4.a. An analysis and summary of the investigation, including a description of the type and extent of contamination at each SWMU including sources and migration pathways;
  - VI.C.4.b. Recommendations for additional investigations, corrective action, or no further action for each SWMU investigated under the RFI Workplan.

**VI.D. ADDITIONAL INVESTIGATIONS**

- VI.D.1. If the Permittee proposes additional investigations in accordance with Condition VI.C.4.b., he shall submit, within 60 days after the RFI Report is approved, a revised RFI Workplan to the Executive Secretary for approval. The RFI Workplan shall include those provisions specified in Condition VI.C.1. and any other provisions necessary to achieve the purposes and objectives of the RFI.
- VI.D.2. Within 30 days of Executive Secretary approval, the Permittee shall implement the revised RFI Workplan.
- VI.D.3. Within 90 days of completion of the subsequent investigation, the Permittee shall submit an investigation report to the Executive Secretary for approval. The investigation report shall include:
- VI.D.3.a. An analysis and summary of the investigation, including a description of the type and extent of contamination at each SWMU including sources and migration pathways;
- VI.D.3.b. Recommendations for corrective action, or no further action for each SWMU investigated under the revised RFI Workplan.

**VI.E. CORRECTIVE ACTION**

- VI.E.1 If the Permittee proposes corrective action for any SWMU based on the results of the RFI, the Permittee shall submit to the Executive Secretary for approval a Corrective Measure Study (CMS). The CMS shall be submitted within 90 days after the RFI Report is approved and shall include:
- VI.E.1.a. An introduction describing the overall purpose of the CMS
- VI.E.1.b. A summary on the current conditions and conceptual site model for SWMUs included in the CMS;
- VI.E.1.c. Corrective measure objectives, including proposed media cleanup standards;
- VI.E.1.d. An evaluation of potential corrective measure technologies which includes an assessment of the long-term reliability, effectiveness and implementability of the alternatives;
- VI.E.1.e. A detailed description of any proposed pilot, laboratory and/or bench scale studies (pilot or bench scale studies already conducted by the Permittee may be incorporated into the CMS);
- VI.E.1.f. A proposal for corrective measure(s) that shall satisfy corrective measure objectives, attain cleanup standards, control the sources of releases, and comply with applicable standards for the management of wastes; and

- VI.E.1.e. A public involvement plan.
- VI.E.2. Within 90 days of approval of the CMS by the Executive Secretary, the Permittee shall submit a Corrective Measure Implementation Plan (CMI). The CMI Plan shall be submitted to the Executive Secretary for approval. The CMI Plan shall describe in detail how the approved CMS will be implemented for the identified SWMUs. The CMI Plan shall include:
  - VI.E.2.a. Design plans and specifications for the approved corrective measure(s);
  - VI.E.2.b. A CMI Project Management Plan;
  - VI.E.2.c. Operation and Maintenance Plan for corrective measure(s);
  - VI.E.2.d. Corrective Measure Monitoring Plan to describe how the effectiveness of the corrective measure will be assessed;
  - VI.E.2.e. Corrective measure completion criteria to determine when corrective measures have achieved the cleanup objectives;
  - VI.E.2.f. Construction Workplan and construction quality assurance objectives;
  - VI.E.2.g. Public Involvement Plan; and
  - VI.E.2.h. A schedule for the implementation of corrective measures.
- VI.E.3. Upon approval of the CMI Plan, the Permittee shall implement the corrective measure(s) according to the schedule contained in the CMI Plan.
- VI.E.4. Within 90 days of completing construction of the corrective measure(s), the Permittee shall submit for the Executive Secretary's approval a Corrective Measure Implementation Report. The report shall certify that the project was built according to the design plans and specifications, and that the corrective measure is performing adequately. The report shall also include, at a minimum, the following elements:
  - VI.E.4.a. A summary on the construction of the corrective measure, including any deviation or modification to the design plans and specifications;
  - VI.E.4.b. Construction quality assurance documentation; and
  - VI.E.4.c. As built drawings or photographs.

**VI.F. DETERMINATION OF NO FURTHER ACTIONS**

- VI.F.1. At any time during an investigation of a SWMU, the Permittee may petition the Executive Secretary for a determination of no further action (NFA).
- VI.F.2. The NFA petition shall contain information based on the SWMU Assessment Report, identified in Condition VI.H.2., the RFI Report or any other information that demonstrates that:
  - VI.F.2.a. Hazardous waste or hazardous constituents are not detected; or
  - VI.F.2.b. Hazardous waste or hazardous constituents have been detected, but are below background concentrations; or
  - VI.F.2.c. Hazardous waste or hazardous constituents have been detected, but do not pose a threat to human health or the environment; in accordance with R315-101 of the Utah Administrative Code.
- VI.F.3. A determination of NFA, in accordance with Condition VI.F.1., shall not preclude the Executive Secretary from requiring further investigations, studies, or remediation at a later date if new information or subsequent analysis indicates a release or potential of a release from a SWMU at the Permittee's facility.

**VI.G. INTERIM MEASURES**

- VI.G.1. If the Permittee determines that a release or potential release of hazardous waste or hazardous constituents from a SWMU poses a threat to human health and the environment, the Permittee shall notify the Executive Secretary and shall submit an Interim Measures Plan for approval within 30 days.
- VI.G.2. Notification under Condition VI.G.1. shall include an evaluation of the following:
  - VI.G.2.a. Time required to develop and implement a final remedy;
  - VI.G.2.b. Actual and potential exposure of human and environmental receptors;
  - VI.G.2.c. Actual and potential contamination of drinking water supplies and sensitive ecosystems;
  - VI.G.2.d. The potential for further degradation of the medium absent interim measures;
  - VI.G.2.e. Presence of hazardous constituent(s) in containers that may pose a threat of release;
  - VI.G.2.f. Presence and concentration of hazardous constituent(s) in soils that have the potential to migrate to groundwater or surface water;

- VI.G.2.g. Weather conditions that may affect the current levels of contamination;
- VI.G.2.h. Risks of fire, explosion, or accident; and
- VI.G.2.i. Other situations that may pose threats to human health and the environment.
- VI.G.3. The Interim Measures Plan shall include the following:
  - VI.G.3.a. Proposed mitigation measures for potential threats to human health and the environment that are consistent with any long-term solution at the Permittee's facility;
  - VI.G.3.b. Data collection quality assurance and data management information;
  - VI.G.3.c. Design plans and specifications, construction requirements, operation and maintenance requirements, project schedules, and final design documents;
  - VI.G.3.d. Construction quality assurance objectives, inspection activities, sampling requirements, and documentation; and
  - VI.G.3.e. Schedule for submittal of progress reports and final interim measures report.
- VI.G.4. Upon approval by the Executive Secretary, the Permittee shall implement the Interim Measures Plan.
- VI.G.5. The Executive Secretary may require the submission of an Interim Measures Plan as specified in Condition VI.G.1.
- VI.G.6. If any release or potential release of hazardous waste or hazardous waste constituents from a SWMU poses an imminent hazard to human health or the environment, the Permittee shall immediately notify the Executive Secretary. The Executive Secretary may then require corrective action to be implemented.

**VI.H. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF  
NEWLY IDENTIFIED SOLID WASTE MANAGEMENT UNITS**

- VI.H.1. The Permittee shall notify the Executive Secretary in writing, of any newly identified SWMU(s) not identified in Section VI.A., within 30 days of discovering the SWMU(s). The notification shall include the location of the new SWMU(s) and information on the suspected or known wastes at the site. New SWMUs shall be incorporated into the Permit in accordance with Condition I.E.2.
- VI.H.2. Within 90 days following the notification required by Condition VI.H.1., the Permittee shall submit a SWMU Assessment Report to the Executive Secretary describing the existing information on the nature and extent of contamination.

- VI.H.3. The SWMU Assessment Report shall include the following:
  - VI.H.3.a. The SWMU location, identified on a map;
  - VI.H.3.b. The type and function of the unit, including general dimensions and a structural description;
  - VI.H.3.c. The period during which the unit was operated;
  - VI.H.3.d. A list of all wastes and their quantities managed at the SWMU;
  - VI.H.3.e. A description, including analytical data if available, of any known releases of hazardous waste or hazardous constituents from the unit;
  - VI.H.3.f. An assessment of all potential migration pathways;
  - VI.H.3.g. Identification of areas where additional information is necessary; and
  - VI.H.3.h. Based on the results of the SWMU assessment, a proposal for further investigation in accordance with Section VI.C., corrective action in accordance with Condition VI.E.1., or no further action in accordance with Section VI.F.
- VI.H.4. The SWMU Assessment Report shall be subject to Executive Secretary approval.

**VI.I. REPORTING REQUIREMENTS**

- VI.I.1. The Permittee shall submit to the Executive Secretary written semi-annual progress reports of all activities conducted pursuant to the Conditions of Module VI.
- VI.I.2. The semi-annual progress reports shall be submitted each year on March 15<sup>th</sup> and September 15<sup>th</sup> and shall contain:
  - VI.I.2.a. A description of the work completed;
  - VI.I.2.b. Summaries of all findings and all raw data;
  - VI.I.2.c. Summaries of all problems encountered during the reporting period and actions taken or to be taken to rectify problems; and
  - VI.I.2.d. Projected work for the next reporting period.
- VI.I.3. All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities

undertaken pursuant to Conditions in Module VI shall be maintained by the Facility for the effective term of this permit. These records must be made accessible to the Executive Secretary upon request.

- VI.I.4. Upon written approval from the Executive Secretary, the Permittee may receive extensions for report due dates for the submittals required by Module VI.
- VI.I.5. The Executive Secretary may require the Permittee to conduct new or more extensive assessments, investigations, or studies, as needed, based on information provided in these progress reports or other supporting information.